

## **Stellar Pulsation Meeting Program with Timeline**

### **Monday, June 1 Schedule**

8:00–8:45 Put up posters

8:45–9:00 Welcome

### **Session I. Cepheids and the Distance Scale Chair: W. Gieren**

9:00–9:30 Thomas Barnes, Cepheid Distance Scale (Invited)

9:30–9:45 Wolfgang Gieren, A direct distance to the LMC from Cepheid variables

9:45–10:00 Giuseppe Bono, The Cepheid period–luminosity relation and the extragalactic distance scale

10:00–10:15 Lucas Macri, The SH0ES project: HST observations of Cepheids in NGC 4258 and type Ia SN hosts and implications for the Hubble Constant

10:15–10:45 Coffee break and Poster viewing

10:45–11:00 Nicolas Nardetto, From the dynamics of Cepheids to the Milky Way rotation, and the distance scale calibration

11:00–11:15 Shashi Kanbur, Multiphase PC/PL relations: Comparison between theory and observations

### **Session II. Cepheid Theory and Observations Chair: Stephen Becker**

11:15–11:45 J. Robert Buchler, Cepheid Pulsation Theory (Invited)

11:45–noon Victoria Scowcroft, The effect of metallicity on Cepheid magnitudes and the distance to M33

Noon–1:15 Lunch

1:15–1:45 David Turner, Polaris and its Kin (Invited)

1:45–2:00 Nancy Evans, Fundamental Parameters of Cepheids:  
Masses and Multiplicity

2:00–2:15 Radek Smolec, On resonant and non-resonant origin of  
double-mode Cepheid pulsation

2:15–2:30 Antoine Merand, What we learned from interferometric  
observations of Cepheids

2:30–2:45 Igor Soszynski, OGLE Data (short invited talk)

2:45–3:00 Edward Schmidt, Mining sky surveys for astrophysically  
interesting variable stars: The Cepheid period range

3:00–3:30 Coffee Break and Poster Viewing

### **Session III. Red Giants and Supergiants Chair: Peter Wood**

3:30–4:00 Lee Anne Willson, Red Giant and Supergiant Pulsations  
(Invited)

4:00–4:15 Christine Nicholls, New results on long secondary  
periods in red giants

4:15–4:30 Saskia Hekker, Red giants observed with CoRoT

4:30–4:45 Michelle Creech-Eakman, Multiwavelength study of  
pulsation and dust production in Mira variables using optical  
interferometry for constraints

4:45–5:00 Hilding R. Neilson, The connection between pulsation,  
mass loss, and circumstellar shells in classical Cepheids

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### **Tuesday, June 2 Schedule**

### **Session IV. RR Lyrae Variables in Stellar Systems Chair: Thomas Beach**

9:00–9:30 Horace Smith, RR Lyrae Variables in Stellar Systems  
(Invited)

9:30–9:45 James Nemec, The variable stars in the LMC star cluster NGC 2257

9:45–10:00 George Wallerstein, Carbon-rich RR Lyrae stars

**Session V. RR Lyrae Pulsation Theory and Observations Chair: Giuseppe Bono**

10:00–10:30 Marcella Marconi, RR Lyrae Pulsation Theory (Invited)

10:30–noon Coffee break and Poster viewing

Noon to 1:00 pm Lunch

1:00–1:15 Annie Baglin, Seismic Landscape as seen from CoRoT (short invited talk)

1:15–1:30 Merieme Chadid, First RR Lyrae light curve from CoRoT: Big challenge and constraint to the theoretical models

1:30–1:45 Margit Paparo, Shock wave and pulsation connection in a monoperiodic CoRoT RR Lyrae star

1:45–2:00 Istvan Dekany, Physical Properties of double-mode RR Lyrae stars based on pulsation and evolution models

2:00–2:30 Coffee Break and Conference Photo

**Session VI. The Blazhko Effect Chair: Merieme Chadid**

2:30–3:00 Geza Kovacs, The Blazhko Effect (invited)

3:00–3:15 Johanna Jurcsik, New results of the Konkoly Blazhko group

3:15–3:30 Arthur N. Cox, Radial and nonradial beating modes for RR Lyrae variable star Blazhko effects

3:30–3:45 Short Stretching Break

3:45 –4:00 Katrien Kolenberg, Observational constraints on the magnetic field of RR Lyrae stars

4:00–4:15 Adam Sodor, Changes in mean global physical parameters of Blazhko variables derived from multicolour photometry

4:15–5:00 Additional poster viewing time

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### **Wednesday, June 3 Schedule**

#### **Session VII. B Star Pulsations Chair Wojciech Dziembowski**

9:00–9:30 Arthur N. Cox, LBV and Wolf Rayet Variables (invited)

9:30–10:00 Luis Balona: Beta Cephei, SPB, and Be variables (Invited)

10:00–10:15 A. Pigulski, Beta Cephei Stars from the ASAS: A New Look at Hot Pulsators (short invited talk)

10:15–10:45 Coffee Break and Poster Viewing

10:45–11:00 Richard Townsend, Toward self-consistent angular momentum transport in pulsating massive stars

11:00–11:15 Catherine Lovekin, Rotation and overshoot in the beta Cephei star theta Ophiuchi

11:15–11:30 Robert Deupree, Rotational Splitting of Pulsation Modes in Rapidly Rotating Stars

#### **Session VIII. Solar-Type Variable Stars Chair: J. Molenda-Zakowicz**

11:30–12:00 Guenter Houdek, Solar-type Variable Stars (invited)

12:00–12:15 Andrea Miglio, Inference from adiabatic analysis of solar-like oscillations in red giants

12:15 to 1:30 Lunch

1:30 Tour of Los Alamos, free afternoon

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### **Thursday, June 4 Schedule**

#### **Session IX. Delta Scuti Stars Chair: Michel Breger**

9:00–9:30 Gerald Handler, delta Scuti Variables (Invited)

9:30–9:45 Michel Breger, Period variations in delta Scuti stars

9:45–10:05 D.H. McNamara, Interesting properties of delta Scuti stars

10:05–10:20 Arti Garg, HADS in the LMC: Initial Findings from the SuperMACHO project

10:20–10:35 Ennio Poretti, The CoRoT era: a new look to delta Sct stars from space

10:35–noon Coffee Break and Poster viewing

Noon–1:00 Lunch

#### **Session X. Solar Oscillations Part 1 Chair: J. Christensen-Dalsgaard**

1:00–1:30 Alexander Kosovichev, Solar Oscillations (Invited)

1:30–1:45 Rafael Garcia, SOHO data (short invited talk)

1:45–2:00 Irina Kitiashvili, Realistic MHD numerical simulations of solar convection and oscillations in magnetic regions

#### **Session XI. Gamma Doradus Variables Chair: J. Matthews**

2:00–2:30 Karen Pollard, Gamma Doradus Variables (Invited)

2:30–2:45 Duncan Wright, Results from classification observations and a multi-site campaign on gamma Doradus and SPB type stars

2:45–3:15 Coffee Break and Poster Viewing

**Session XII. Rapidly Oscillating Ap and Chemically-Peculiar stars Chair: H. Shibahashi**

3:15–3:30 MOST Data, Jaymie Matthews (short invited talk)

3:30–4:00 Don Kurtz, Pulsation in chemically peculiar stars of the upper main sequence (Invited)

4:00–4:15 Hiromoto Shibahashi, Numerical simulations of line profile variation in roAp stars

4:15–4:30 Hideyuki Saio, Modelling pulsations of the roAp star HR 1217 (HD 24712)

**6:00 Banquet at La Fonda Hotel** Guest speaker Robert Christy; also featuring Mozart clarinet quintet (clarinet + string quartet)

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**Friday, June 5 Schedule**

**Session XIII. Solar Oscillations Part II Chair: J. Christensen-Dalsgaard**

9:00–9:15 Joanna Molenda-Zakowicz, Spectroscopic and photometric observations for Kepler asteroseismic targets

9:15–9:30 Travis Metcalfe, An asteroseismic model-fitting pipeline for solar-like oscillations

9:30–9:45 Joyce Ann Guzik, Early solar mass loss, opacity uncertainties, and the solar abundance problem

## **Session XIV. SDB, White Dwarf, and Post AGB Stars Chair: Paul Bradley**

9:45–10:15 Stephane Charpinet, Subdwarf B Stars Pulsations (Invited)

10:15–10:45 Coffee Break and poster viewing

10:45–11:00 Bruce Hrivnak, Pulsational light and velocity variability in post-AGB stars

11:00–11:30 Mike Montgomery, White Dwarf and Pre-White Dwarf pulsations (Invited)

11:30–11:45 Barbara Castanheira, Seismological studies of ZZ Ceti stars

11:45–12:30 Poster Viewing

12:30–1:30 Lunch

1:30–1:45 Agnes Kim, Asteroseismological analysis of rich pulsating white dwarfs

1:45–2:00 Ann Marie Cody, Pulsation powered by deuterium burning in brown dwarfs and low-mass stars

2:00–2:15 Stephane Mathis, Magneto-Gravito-Inertial waves in strongly stratified stellar radiation zones

2:15–2:30 Zsolt Bognar, Light curve patterns and seismology of a white dwarf with complex pulsation

2:30–2:45 Giuliana Fiorentino, The ancient population of Messier 32

2:45–3:00 Short Stretching Break

3:00–4:00 Wrap-up, closing remarks, thanks, next pulsation meeting, proceedings directions

5:00 Bus departs for Albuquerque Grand Hotel near airport.